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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,816	03/31/2004	Kenneth W. Holappa	E1449-00001	5040
8933	7590	10/06/2005	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			JACKSON, ANDRE K	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/813,816

Applicant(s)

HOLAPPA ET AL.

Examiner

André K. Jackson

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____   | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1,2,4-10,14,15 and 17-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Endo et al.

Regarding claim 1, Endo et al. disclose in the patent entitled "Method and device for determining the amount of a liquid existing in a container" a liquid containing vessel having an insulating inner surface, an outer surface and electronic components disposed between the insulating inner surface and the outer surface, the electronic components providing a sensory (buzzer, 31) output indicative of a liquid level of a liquid within the liquid containing vessel (Abstract, Figure 1).

Regarding claim 2, Endo et al. disclose where the electronic components include a capacitor comprising at least two conductive plates disposed adjacent to the insulating inner surface (Figures 1,2).

Regarding claim 4, Endo et al. disclose where at least one of the conductive plates extends beneath at least part of a bottom of the insulated inner surface (Figure 7).

Regarding claim 5, Endo et al. disclose where the electronic components provide said sensory output with at least one characteristic that varies as a function of the liquid level (Abstract, Figures 1,2).

Regarding claim 6, Endo et al. disclose where the characteristic includes at least one of amplitude, frequency, repetition rate and duty cycle (Abstract, Figure 1).

Regarding claim 7, Endo et al. disclose in which the sensory output is perceptible by a changeable non-visual attribute (buzzer 31).

Regarding claim 8, Endo et al. disclose where sensory output is one of audible, vibratory and tactile (buzzer 31).

Regarding claim 9, Endo et al. disclose where the sensory output assumes a distinct characteristic the liquid level is at or above a predetermined threshold liquid level (Column 5).

Regarding claim 10, Endo et al. disclose where the sensory output achieves a continuous state when the liquid level is at or above the threshold liquid level (Column 5).

Regarding claim 14, Endo et al. disclose where the liquid containing vessel includes an insulating inner wall, an outer wall and a space there between, the insulating inner surface forming an external part of the inner

wall and the outer surface forming an external part of the outer wall (Figures 1,2).

Regarding claim 15, Endo et al. disclose where the electronic components include a capacitor formed of at least two conductive plates disposed adjacent to an internal surface of the insulating inner wall, and where the electrical components are disposed within a hollow space between the inner wall and the outer wall (Figures 1,2).

Regarding claim 17, Endo et al. disclose providing a liquid containing vessel having an insulating inner surface and an outer surface and electronic components disposed there between, the electronic components including at least two conductive plates of which at least one conductive plate is disposed between the inner surface and the outer surface in proximity with a volume of the vessel; providing a liquid with a liquid level in the liquid containing vessel so as to at least partly occupy the volume, thereby affecting a capacitance value associated with the conductive plates, the capacitance varying with the liquid level; sensing the capacitance that varies with the liquid level; and providing a sensory output that is indicative of said liquid level, at least partly as a function of the capacitance parameter (Abstract, Figures 1,2).

Regarding claim 18, Endo et al. disclose where the providing a sensory output includes providing a sensory output signal that is perceivable by a non-sighted user (buzzer 31).

Regarding claim 19, Endo et al. disclose where the providing a sensory output comprises providing a signal that varies as to at least one of amplitude, frequency, repetition rate and duty cycle as a function of at least one of a sensed capacitance within a range corresponding to a range of liquid levels, and a sensed capacitance corresponding to the liquid level reaching a predetermined threshold (Figures 1,2).

Regarding claim 20, Endo et al. disclose where a continuous change of the liquid level produces a continuous change in the sensory output (31, buzzer).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. in view of Liao.

Regarding claim 3, Endo et al. do not disclose where the liquid containing apparatus includes a lip and a bottom and the conductive plates extend substantially from said lip to the bottom. However, Liao discloses in the patent entitled "Cup shape sensible container for detecting

liquid property" where the liquid containing apparatus includes a lip and a bottom and the conductive plates extend substantially from said lip to the bottom (Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Endo et al. to include where the liquid containing apparatus includes a lip and a bottom and the conductive plates extend substantially from said lip to the bottom. By adding this feature the apparatus would be able to measure the level across the entire container.

5. Regarding claim 16, Endo et al. disclose a liquid containing vessel including a wall having an inner surface and an opposed outer surface and formed of an insulating material, a duality of conductive plates disposed on the outer surface (Figures 1, 2). Endo et al do not disclose and covered by a handle member permanently affixed to the liquid containing vessel and having electronic components therein, the electronic components including a capacitor formed of the duality of conductive plates and providing a sensory output indicative of a liquid level of a liquid within the liquid containing vessel. However, Liao discloses a handle member permanently affixed to the liquid containing vessel and having electronic components therein, the electronic components including a capacitor formed of the duality of conductive plates and providing a sensory output indicative of a liquid level of a liquid within the liquid containing vessel (Figure 1). Therefore, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to modify Endo et al. to include a handle member permanently affixed to the liquid containing vessel and having electronic components therein, the electronic components including a capacitor formed of the duality of conductive plates and providing a sensory output indicative of a liquid level of a liquid within the liquid containing vessel.

6. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. in view of the prior art [maxiaids.com](http://maxiaids.com).

Regarding claim 11, Endo et al. do not disclose where the sensory output is a voice annunciation respecting the liquid level. However, [maxiaids.com](http://maxiaids.com) disclose in the "Talking liquid Jug" that it is known to have the output as a voice annunciation respecting the liquid level. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Endo et al. to include where the output is a voice annunciation respecting the liquid level. By adding this feature the apparatus would be able to precisely tell the level of the liquid within the container.

Regarding claim 12, Endo et al. do not disclose where the liquid containing vessel comprises one of a cup, a pot, a jug, a pitcher, a carafe, and a measuring cup. However, [maxiaids.com](http://maxiaids.com) disclose in the "Talking liquid Jug" where the liquid containing vessel comprises one of a cup, a pot, a jug, a pitcher, a carafe, and a measuring cup. Therefore, it would



have been obvious to one of ordinary skill in the art at the time the invention was made to modify Endo et al. to include where the liquid containing vessel comprises one of a cup, a pot, a jug, a pitcher, a carafe, and a measuring cup. By adding this feature the apparatus would be able to precisely tell the level of the liquid within the container regardless of what type of container the device is being used with.

Regarding claim 13, Endo et al. do not disclose where electronic components include a removable battery and the outer surface includes a door or plate for accessing the removable battery. However, maxiaids.com disclose in the "Talking liquid Jug" where electronic components include a removable battery and the outer surface includes a door or plate for accessing the removable battery. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Endo et al. to where electronic components include a removable battery and the outer surface includes a door or plate for accessing the removable battery. By adding this feature the apparatus would be able to provide an energy source that can be easily replaced when the source has a loss of power.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone

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number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.J.

September 29, 2005

  
HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
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